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## NOTICE OF ALLOWANCE AND FEE(S) DUE

52123 7590 08/18/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 EXAMINER
SHECHTMAN, SEAN P

ART UNIT PAPER NUMBER
2121
DATE MAILED: 08/18/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,390	07/24/2006	Tokumi Kobayashi	P30306	1319

TITLE OF INVENTION: MANAGEMENT METHOD AND SYSTEM FOR DEVICE REQUIRING MAINTENANCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/18/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

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APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO. CONFIRMAT			RMATION NO.
10/597,390	07/24/2006			Tokumi Kobayashi			P30306		1319
				OR DEVICE REQUIRING					
APPLN, TYPE	SMALL ENTITY	ISS	UE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE TOTAL FEE(S) D		TOTAL FEE(S) DUE		DATE DUE
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SHECHTMA			2121	700-108000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp	nge of C "Indication Use A TO BE	orrespondence ion form of a Customer PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternati (2) the name of a singl registered attorney or 2 2 registered patent atto listed, no name will be THE PATENT (print or typ data will appear on the p T a substitute for filing an (B) RESIDENCE: (CLTY)	3 registered pater vely, e firm (having as a sagent) and the nam rneys or agents. If printed.  be) atent. If an assign assignment.	memb es of u no nan	er a 2p to p to ge is 3	ocument !	has been filed for
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NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) wi ites Pater	III not be accepted at and Trademark	d from anyone other than t Office.	he applicant; a regi	stered	attorney or agent; or th	e assigne	e or other party in
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52123 7.	590 08/18/2008		EXAM	UNER		
GREENBLUM &	& BERNSTEIN, P.L.	SHECHTMAN, SEAN P				
1950 ROLAND C			ART UNIT	PAPER NUMBER		
RESTON, VA 201	191		2121			
			DATE MAILED: 08/18/200	8		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)			
10/597,390	KOBAYASHI, TOKUI	мі		
Examiner	Art Unit			
Sean P. Shechtman	2121			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERTIS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon netition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 6/26/08.
- The allowed claim(s) is/are 1-4,6-12 and 15.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) 

    All b) 

    Some\* c) 

    None of the:
    - 1. T Certified copies of the priority documents have been received.
    - Certified copies of the priority documents have been received in Application No.
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) Thereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other \_\_\_\_\_.

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#### DETAILED ACTION

### Claim Objections

Objections withdrawn.

# Claim Rejections - 35 USC § 112

Rejections withdrawn.

# Claim Rejections - 35 USC § 103

Rejections withdrawn.

# Allowable Subject Matter

Claims 1-4, 6-12, 15 are allowed.

The following is an examiner's statement of reasons for allowance:

While Kobayashi teaches a management method for a removable device, including a parts cassette or a suction nozzle, that is attachable to an apparatus and is removable from the apparatus (Fig. 2, cartridges), the management method comprising: one or more removable devices each of which has an identification code given thereto for identifying the corresponding removable device (See Fig. 2, cartridges, Col. 11, lines 59-67, the cartridge ID bar code); a database (Figs. 1 and 12, element 31a, database) for storing maintenance data for the one or more removable device (Figs. 1 and 12, element 31a, database; Col. 12, lines 22-40, database stores/updates an inventory parts file; Fig. 14, elements 102, the examiner respectfully submits that the inventory parts file indicating the number of remaining parts is maintenance data for one or more cartridges because Kobayashi teaches that "if parts run out during the mounting of parts by a mounting machine, reel replacement processing is executed. At this time a new

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reel is found and loaded in a cartridge" in Col. 31, lines 29-33; See Fig. 2, cartridges), the maintenance data including location data indicating the location of the removable device in a component-mounting plant (Fig. 14, element 102, cartridge ID; Col. 11, lines 59-64 and Col. 17, lines 41-44, the cartridge ID is the address on the storage rack, Col. 31, lines 11-28, cartridge ID address changed to part setting position; Col. 1, lines 5-9, SMT manufacturing); a data management unit (Col. 12, lines 22-29, Figs. 1 and 12, server 31) for recording and reading the maintenance data for each removable device into/from the database (Col. 12, lines 22-29, Figs. 1 and 12, server 31 and database 31a, server registers each type of file, the files are added on and updated); a communication device (Fig. 12, element 41, Col. 13, lines 21-24, LAN) for sending and receiving the maintenance data between a terminal and the data management unit (Col. 11, lines 25-52, personal computer manages inventory parts file, including the number of remaining parts; Fig. 12, element 32, personal computer, Col. 12, lines 48-51; Fig. 12, element 31, server, Col. 12, lines 22-28, server registers each type of file, the files are added on and updated); wherein the data management unit stores the received maintenance data for each of the identification codes of the removable devices (Fig. 12, element 31, server, Col. 12, lines 22-28, server registers each type of file, the files are added on and updated; Fig. 14, element 102, parts inventory file, cartridge ID and number of parts remaining), the received maintenance data including the location data (Fig. 14, element 102, cartridge ID; Col. 11, lines 59-64 and Col. 17, lines 41-44, the cartridge ID is the address on the storage rack); the terminal including reading device for reading an identification code of one or more of the one or more removable devices

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(See Fig. 2, element 32 includes element 33, bar code reader; Col. 12, lines 51-54, reading cartridge ID), and inputting and outputting the read identification code together with the maintenance data (Col. 11, lines 25-52, personal computer manages inventory parts file, including the number of remaining parts, Col. 12, lines 5-20, personal computer changes the information of the location of the reel to the cartridge ID. Col. 12. lines 22-40, inventory management file is stored in and updated in database, the examiner respectfully submits that the personal computer managing inventory parts file (the inventory management file including the number of remaining parts and cartridge ID) stored in and updated in database over a LAN (Fig. 12) is inputting and outputting the read identification code together with the maintenance data); wherein inputting of a destination location of a device or anything by the terminal occurs every time the location of the removable device changes (Col. 30, lines 14-24, Col. 12, lines 5-20, cartridge extracted and location of reel in the inventory parts management file is changed to the cartridge ID: Col. 30, lines 25-36, cartridge separated from reel and the location of the reel is changed to free; Col. 31, lines 11-20, cartridge set on cartridge table and reel location is changed to part setting position); wherein reading of the identification code of the removable device occurs every time the location of the removable device changes (Col. 30, lines 14-24, Col. 12, lines 5-20, cartridge extracted and the cartridge ID is read; Col. 30, lines 25-36, cartridge separated from reel and the cartridge ID is read; Col. 31, lines 11-20, cartridge set on cartridge table and the cartridge ID is read); wherein the maintenance data further includes history data

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including performance of the removable device (Col. 15, lines 44-45, the number is decremented).

And, Fujiwara teaches a mobile terminal (Fig. 1, element 1) including reading device for reading an identification code of a device (page 4, paragraph 83, component code), and having a function of inputting and outputting the read identification code together with maintenance data (Page 4, paragraphs 86 and 88, component code, ordering quantity, time and date, automatic ordering of out-of-stock components); and communication device, including a PHS radio communication device (Pages 3-4, paragraph 80; Fig. 1, elements 3, 31, 32) for sending and receiving the maintenance data between the mobile terminal and a data management unit (Fig. 1, element 33).

And, U.S. Pat. No. 6,609,41 to Sanka et al teaches a database storing cassette repair status (Col. 16, lines 28-67).

Referring to claim 1, none of Kobayashi, Fujiwara, or Sanaka, taken either alone or in obvious combination disclose a management method for a removable device, including a parts cassette or a suction nozzle, that is attachable to an apparatus and is removable from the apparatus having all the claimed features of applicant's instant invention, specifically including: "storing maintenance data for the removable device in a computer readable medium of a data management unit, the maintenance data including location data indicating the location of the removable device in a component-mounting plant;" and "wherein the maintenance data further includes history data including performance of the removable device and history of repair".

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Referring to claim 6, none of Kobayashi, Fujiwara, or Sanaka, taken either alone or in obvious combination disclose a system for managing a removable device that is attachable to an apparatus and is removable from the apparatus having all the claimed features of applicant's instant invention, specifically including: "a plurality of removable devices each of which has an identification code given thereto for identifying the corresponding removable device; a database for storing maintenance data for each removable device, the maintenance data including location data indicating the location of the removable device;" and "wherein the maintenance data further includes history data including performance of the removable device and history of repair".

Claims 2-4, 7-12, 15, depend from claims 1 or 6 and are therefore also allowable.

It is for these reasons that applicant's invention defines over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571)272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPS

Sean P. Shechtman

August 8, 2008

/Sean P. Shechtman/ Primary Examiner, Art Unit 2121